Quincke's disease to erythema multiforme, erythromelalgia and Raynaud's disease were encountered. The most common site of occurrence of the swellings was the face (80 per cent), the eyes, lips, hands, arms, tongue coming next in frequency.

**Herpes Zoster Associated with Disease of Internal Organs.**—ARNSTEIN (*Wien. klin. Wchnschr.*, 1921, xxxiv, 13) describes a series of cases illustrating the occurrence of herpes zoster as the sole presenting symptom in diseases of internal organs. In an inflammatory disease of the liver, the herpes appeared along the course of the ninth thoracic nerve on the right. In a pulmonary infection in the left base, herpes appeared along the course of the fourth and fifth left thoracic nerves, later becoming generalized. In another case in which the left lower lobe was infiltrated, the lesions followed the course of the sixth thoracic nerve on the left. The course of the fifth thoracic on the right was affected in a case of involvement of the right apex, while an infection of the left apex was accompanied by a herpes at the level of the sixth left cervical nerve, and at the level of the third or fourth nerves in other cases. These areas correspond somewhat to the zones of Head, and the phenomena were explained on the basis that areas of lessened resistance resulted in the ganglia of the viscera-sensory reflex, followed by a hemorrhagic inflammation, from an infectious or toxic agent. The author suggests that all cases of herpes zoster should be examined for hidden internal lesions.

## SURGERY

UNDER THE CHARGE OF

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**Flocculation Reactions in Syphilis with Especial Reference to the Meinicke and Sachs-Georgi Reactions.**—LEVINSON (*Am. Jour. Syphilis*, 1921, v, 414) says that a brief *resume* of the numerous studies of the Wassermann reaction discloses two schools of thought (1) that which believes that the Wassermann reaction is an antigen-antibody reaction, and has attempted to modify and simplify this reaction; (2) that school which follows the study of the chemistry of the colloids and has attempted to show a parallelism between the Wassermann reaction and certain colloidal reactions. The latter has led to the Meinicke and Sachs-Georgi reactions. The Meinicke reaction is a test based on the hypothesis that the reaction between serum and extract takes place when extract colloids disturb the isotonicity of salt solution permitting the union of seroglobulins and lipoid extracts. This reaction is greatly intensified in positive syphilitic

serums as compared with negative. The various forms of Meinicke's reactions are the water method, salt solution method, and the third method, using an antigen prepared according to the method of Wassermann with the addition of horse heart extract. The Sachs-Georgi reaction is a physicochemical reaction between seroglobulins and lipoid extracts. Phases 1 and 11 of the Meinicke reaction showed 89.2 per cent agreement with the Wassermann reaction; this reaction is in all respects characteristic for syphilis and it is more simple than the so-called third modification or Sachs-Georgi reaction. The third modification of the Meinicke reaction is more simple and is therefore recommended. The agreement with the Wassermann reaction is 88.8 per cent. In many cases it is positive earlier and often remains longer than the Wassermann reaction. The Sachs-Georgi reaction has met with the approval of many investigators. The non-specific reactions are less frequent with this test. None of these reactions can at present supplant the Wassermann reaction, but may be used in conjunction with it.

**Viability of Spirocheta Pallida in Excised Tissue and Autopsy Material.**—LACY and HAYTHORN (*Am. Jour. Syphilis*, 1921, v, 401) say that from their experiments it is evident that spirochetes kept in serum or moist tissue, either human or animal, may retain slight motility as long as three months or more. Reliable dark-field examinations can be made on tissues or fluids collected several hours previously, provided they are kept moist and cool. The authors' results, which are in accord with those of Neisser, would indicate that complete drying is probably fatal to the Spirocheta pallida, since each of the rabbits inoculated with dried spirochetes on scalpels failed to develop syphilitic lesions. Spirocheta pallida may and in the author's case did remain virulent in autopsy material for twenty-six hours or longer.

**Complement-Fixation Tests with Two Antigens.**—LARKIN (*Am. Jour. Syphilis*, 1921, v, 476) says that two antigens whose reliability has been established form a valuable check upon another for routine public health laboratory work. Cholesterinized antigen gave a high percentage of positive and doubtful reactions. This bears out the usual observation that cholesterinized antigens are more sensitive than crude alcoholic antigens. Sera are occasionally found which are undoubtedly positive but which, due to some peculiarity of the serum do not react with one of the antigens used. The cholesterinized antigen, used alone, must be considered a rather unreliable antigen likely to give false positives.

**Studies in the Standardization of the Wassermann Reaction.**—KOLMER (*Am. Jour. Syphilis*, 1921, v, 439) says that the antibody content of serum from mixed venous and arterial blood collected by pricking a finger and of venous blood collected by venipuncture, is identical. Blood sera collected from fingers or by cupping are more likely to become anti-complementary than sera collected by aseptic technic and venipuncture, due to greater chances for bacterial contamination. Syphilitic sera collected at once by defibrinating and centrifuging blood contain as much complement-fixing antibody as